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ORIGINAL COMMUNICATIONS.

ART. I.—*Account of the Epidemic Religious Monomania in Sweden, in the years 1841 and 1842.* By the EDITOR.

Wide spreading epidemics, more or less resembling the one we are about to describe, have doubtless occurred and recurred many a time and oft; sporadic cases are not uncommon; but with the exception of Hecker's admirable description of the dancing mania of the fourteenth century, we have only vague or incomplete accounts of them, and the medical world is much divided in opinion as to their real nature. It is with the desire of adding a mite to the common treasury, that we present our readers with the following picture of the most recent and best observed of such epidemics, the very first case that occurred having been accurately noted, and the spread of the disease subsequently studied by many fully competent physicians, and learned theologians. A paper on the subject has appeared in the *Journal Hygiea*, by our friend, Dr. Sonden, which we shall make use of, and we shall freely draw on all such official reports and documents as are accessible to us.

The disease in question has received quite a choice of aliases, but we hope to show how little claim it has to the majority, by establishing its identity; and to this end we will just glance at the great epidemic referred to, before we proceed to the study of the more recent and the milder one, drawing our materials from the description by Hecker.

The last effects of the "Black Death" had not yet ceased to be felt—the fresh earth that covered the remains of so many millions had not yet sunk to its level—when a singular madness seized on the minds of the German people; an affection that for more than two centuries was by turns the wonder—

by turns the dread of the age, for its unfortunate subjects seemed to be drawn body and soul within the magic circle of a hellish superstition. From their bacchantic leaps, and violent gestures, as screaming, foaming at the mouth, and wearing the aspect of maniacs, they whirled around in the wild ring-dance, the disease was christened the dance of St. John, or of St. Vitus. What these two saints had to do with a dancing mania, we shall presently see. Rapidly the disease spread all over Germany and the countries to the North and West thereof—a true epidemic—in which the mere sight of one affected was sufficient to cause the disease in persons prepared to receive it, by the unequalled emotional and physical trials they had just passed through, or were still suffering.

In the year 1374 came to Aachen (Aix-la-Chapelle) from Germany, troops of men and women, who in churches and public squares, apparently involuntarily and unconscious of the presence of spectators, danced round hand-in-hand in a ring with frantic violence for hours together, until they sank down from exhaustion, complaining of great oppression and anxiety, and groaning as if about to give up the ghost, till somebody bandaged tightly their swollen bellies, when they came to their senses, and so remained until the next attack. People also sought to relieve this tympanitic distension of the abdomen, which accompanied the paroxysm of convulsive mania, by kneading with the hands, striking with the closed fists, or trampling with the feet. Although the affected neither saw nor heard anything going on around them while dancing, they yet had visions, in which spirits appeared to them, whose names they groaned or shouted out. Some in their lucid intervals, said that they seemed to be sinking into a river of blood, and that they exerted themselves so violently, in order to escape so horrible a fate. Others saw the heavens open, with the Holy Ghost sitting enthroned, accompanied by the Mother of God; showing how the belief of the age, in divers manners influenced their disordered fancies. In all probability the disease appeared in various forms; but the descriptions of cotemporaries are mostly from the pens of those, who being unlearned in medicine, and accustomed to mystify natural phenomena by a constant reference to their own fantastic ideas of the world of spirits, took little pains to record those particulars, which neither interested them, nor chimed in with their preconceived notions.

It required but a few months for the malady to spread from Aachen over the neighboring country of the Netherlands, and the number of those affected with it became so great as to awaken the greatest anxiety; for they filled the churches, pro-

cessions were continually parading the streets, masses being sung, and all hearts palpitated with affright at the prevalence of an affection which no one doubted was originated by Satan himself. The clergy of Luttich had resource to exorcisms, and put forth their utmost strength to crush an evil which wore so threatening an aspect, for as they grew in numbers and strength, the affected often called down curses on the heads of the priests, and threatened to take their lives. The authorities themselves became alarmed, and for example, because the madmen expressed their dislike to pointed shoes, and declared that none but square-toe'd were decent and proper, they passed an edict forbidding the use of any other. Many were the strange fancies about similar trifles that were indulged in; some could not bear the sight of any thing of a red color, some would not allow any person to shed tears in their presence. Not without considerable semblance of probability did they avow, under the influence, 'tis said, of priestly exorcisms, that in a few weeks more, the spirits or devils would possess the princes and potentates of the land, and with their aid would entirely root out and destroy the clergy. These avowals, which were made while in *a condition resembling magnetic sleep*, were every where believed, and passed from mouth to mouth with the most extravagant additions. The priests meanwhile employed every means at their command to stem the rising torrent of madness, and seemed unfeignedly to fear that the stability of existing social institutions was threatened. Whether in consequence of their exorcisms and anathemas, or, which is far more probable, of the moral and physical relaxation that naturally followed on such morbid excitement, the evil ceased in Belgium in about ten or eleven months.

A month after the disease first appeared in Aachen, it had reached Cologne and Metz. Farmers left their plows, workmen their shops, wives their homes, to join the wild and mystic dance. The animal propensities were no longer controlled by the dictates of morality, but were allowed full swing, and found abundant opportunity for their unlawful and unrestrained gratification. Hundreds of unmarried women might be seen desecrating the most sacred places, with their disgusting saturnalian orgies. When at length it became evident that the prayers and the curses of the priests were as unavailing to moderate the evil as the prescriptions of the physician, the people themselves took the matter in hand, and proceeded to banish without pity or exception all who were attacked; but it required four months before the authorities of the Rhenish provinces could succeed in re-establishing order, in curbing

the unbridled license which every where prevailed, and in suppressing the luxuriant growth of crime. The disease itself was indeed checked for a time, but having once been produced, continued to return every now and then, although in a milder form, not only throughout the rest of the fourteenth, but up to the sixteenth and even the seventeenth centuries. In the year 1418, the city of Strasburg was visited by it, and in addition to the usual tumultuous proceedings, vast crowds made pilgrimages to the chapel of St. Veit or Vitus. This Veit was a Sicilian youth, who suffered martyrdom along with Modestus and Crescentia, in the year 303, during the persecution of the Christians by Diocletian. The legend wants distinctness, and its hero would probably have remained an unnoticed member of the army of apocryphal martyrs, had not the removal of his bones to St. Denis, and later, in the year 836, to Corvey, conferred on him the dignity of acknowledged saintship, and when it became a matter of importance to strengthen the cause of Roman Catholicism among the Germans, many were the miracles performed at the new shrine, and St. Vitus ere long had the satisfaction to be enrolled among the fourteen holy "Helps-in-need." The good people were made to believe, that according to the legend, previous to his having bowed his head to receive the decapitating blow, he had prayed to God that all who fasted the day before his names-day, and properly observed that, should be freed from the dancing disease, when a voice from heaven was straightway heard, saying, "Vitus! thy prayer is heard." Thus St. Vitus became the patron of all afflicted with the dancing disease, just as St. Martin de Tours is of those sick of the small pox, St. Anthony of those who have the erysipelas, and the holy Margaret of poor women in the pains of child-birth.*

With regard to the origin of this great epidemic, it may be worth while to relate that St. John's or Midsummer-day had been for ages—certainly from the fourth century—celebrated with divers fantastic and extravagant ceremonies, a precious jumble of Christian and Heathen rites, in the mystic meaning of which as much superstition as religion was blended. The

* The following charm against St. Vitus's dance, which was long actually carried by an old woman in Devonshire, England, is not without its significance :

Shake her, good devil,
Shake her once well,
Then shake her no more,
Till you shake her in hell.

Germans, for example, in spite of the peremptory orders of the good Boniface, would persist in lighting bonfires on this day, or its eve, and holding fast to the old heathen practice and belief, that such men or animals as passed through the the flame or smoke, would by this fiery baptism be preserved during the coming year from fevers and all other diseases, and the practice with its accompanying superstitious notions is absolutely observed and entertained by many European nations to this day.* Of these half-christian, half-heathen, festivals, bacchantic dances and licentious orgies—veritable saturnalia—formed an essential part. We are not in possession of sufficiently numerous and correct data, on which to found an authentic history of the origin of the great epidemic of dancing mania, but with the knowledge of the disease we now possess, if we consider that in the first observed cases, the affected perpetually called on the name of St. John, we can hardly resist the conclusion that the celebration of Midsummer-day, 1374, which as might have been expected when pestilence had loosed the bands of morality, was probably accompanied with scenes of unusual license, extravagance, and mental excitement, fired a train which had long been laid—kindled the flame of a disease, a disposition to which had long been ripening. The reasons why customs previously observed without being followed by any such consequences (that is to a note-worthy extent, for doubtless they did occur,) should on this occasion have given rise to so fearful and wide spread an epidemic, is to be sought in the condition—physical and moral—of the people among whom it raged; reeling beneath the blows of a stunning grief, worn down by the gnawing pangs of hunger, at best appeased with a scanty meal of insalubrious food, and feeling a general loosening of the bonds that held society together; all after-effects of the most fearful pestilence, that ever stalked abroad and sowed death broadcast. Some of the symptoms described—the anxiety—meteorism—pains in the stomach and bowels, debilitated by the use of food of bad quality—point directly to one of the factors of the disease, in a way that cannot but strike and interest the reflecting mind. The doctors in those days seem to have altogether resigned the treatment of the affected into the hands of the clergy, at least such was the case in the fif-

* This custom is of the very highest authority, and was common to Jews, Gentiles, Christians and Pagans. In the Fourth Book of Kings it is thus written—"And Manasseh built an altar to all the host of heaven, in the two courts of the Lord's house, and made his children to pass through the fire, &c."

teenth century; it was reserved for the great "medical reformer" of the sixteenth, that arch-quack Paracelsus, to conquer back the disease from the realm of miracles and saints, and having traced its causes to physical derangements of the system, to treat it accordingly—indeed he boasts in his usual style of the number of cures he had performed—and other physicians followed in his wake. Their treatment was in accordance with the notions of the time; but of a truth, the disease itself had become much milder in its character; the screaming, groaning, running and leaping, the tympanitic distension of the abdomen, were no longer prominent symptoms, and the desire to dance but seldom troubled the sick; it had become more like the St. Vitus's dance of our times—*truc chorea*—than the original frightful mania of the fourteenth century.

While the disease we have been describing was still common, another form of it was observed in Italy, to which the name of Tarantismus was given, in consequence of the prevailing belief that it was caused by the bite of an insect—the *Aranea Tarantula*—one of the largest of the European spiders, common in the countries bordering on the Mediterranean, the effects of whose bite are even now much dreaded, and believed to be curable only through the influence of music. Its venomous powers have no doubt been greatly exaggerated, but it should not be forgotten that there is a case related in the New York Repository, in which a convulsive disease supposed to have been occasioned by the bite of a spider, was most effectually counteracted by music. It is not conceivable that any considerable proportion of the great numbers affected with the dancing disease, could have been bitten by the spider, indeed the symptoms in those cases which alone we can allow to have been true tarantismus, were of a purely nervous character, unaccompanied with any evidences of mental derangement. It is easy to detect in the descriptions of the disease which have come down to our times, the common mistake of attributing all *apparently similar* effects, to the same known and easily comprehended cause, in this case the bite or sting of some insect or reptile.

The dancing mania spread from the afflicted to others who beheld them, by what we shall call *psychical contagion*—that is, through the influence of some emotion, as fear, sympathy, or the instinct of imitation, and as somewhat analagous symptoms were known to follow the bite of the tarantula, ignorant people saw in all the cases that occurred, what they imagined to be the familiar consequences of a familiar cause. The

extreme improbability of so many individuals being bitten by the spider, however, probably led to the conjecture that the bites or stings of other insects or reptiles might produce the same effects; hence we find even learned men accusing reptiles, and of these not only the *Lacerta Gecko*, but the *L. Stellio*, both most harmless fly-catching lizards.

The more violent symptoms really produced by the poisonous bite of the tarantula, lasted but a few days—from four to six—analogous to what is observed of the effects following the bites of our common venomous reptiles, when such do not prove fatal, as the adder, the rattlesnake, &c., but when the first more violent symptoms had subsided, they were said to be followed by a peculiar melancholy, under the influence of which the persons affected sought out solitary places—grave yards and the like—and there laid themselves out as if they were dead, howled like dogs, groaned and sighed, leaped and ran wildly about, rolled on the ground, stripped themselves wholly, or otherwise exposed their persons, assumed indecent attitudes, expressed a liking for or a dislike to particular colours, or were never better pleased than when soundly drubbed on the breech, heels, feet, or back. Now an attentive perusal of the descriptions of Baglivi, Sauvages, and others, reveals a striking discrepance, not hitherto noticed we believe, yet once recognized, enabling us to see our way far more clearly in our nosographic researches. Baglivi says, that “when any are stung, shortly after it they fall upon the ground, half dead, their strength and senses going quite from them. Sometimes they breathe with a great deal of difficulty, and sometimes they sigh piteously; but frequently they lie without any manner of motion, as if they were quite dead. Upon the first sounding of the music the forementioned symptoms begin slowly to abate; the patient begins to move his fingers, hands, feet, and successively all parts of the body; and as the music increases their motion is accelerated; and, if he was lying upon the ground, up he gets, (as in a fury,) falls a dancing, sighing, and into a thousand mimic gestures. These first and violent motions continue for several hours, commonly for two or three. After a little breathing in bed, where he is laid to carry off the sweat, and that he may pick up a little strength, to work he goes again with as much eagerness as he did before, and every day spends almost twelve hours by the clock in repeated dancing; and, which is truly wonderful, so far is he from being wearied or spent by this vehement exercise, that (as they say) it makes him more sprightly and strong. There are, however, some stops made; not from any weariness, but because they observe the musical instruments to be

out of tune ; upon the discovery of which, one would not believe what vehement sighings and anguish at heart they are seized with ; and in this case they continue till the instrument is got into tune again, and the dance renewed. This way of dancing commonly holds four days, it seldom reaches to the sixth."

According to the above description, the patients very soon fall into a condition analogous to that caused by the bite of venomous serpents, from which state they are at once aroused by music, and by after violent exercise with profuse sweating, and intervals of profound repose, are cured of their disease. Reasoning a priori, we should have said that such a method of cure would be very likely to prove successful in such a case.

But let us see what the same author says in another place :

"A few hours after the bite, the patient is seized with a great difficulty of breathing, a heavy anguish of heart, and a prodigious sadness," &c. The malady, "after the sharp fit of the violent symptoms, which appear for the first days, is over, ends at last in a peculiar kind of melancholy which continually hangs upon the sick person, till by dancing, or singing, or change of age, those violent impressions are quite extirpated." Again, he states that the disease like the German chorea Sancti Viti, returned about the same time of year that the patient was stung ; and seems much at a loss to understand either how it was produced, or in what manner it was cured. He appears inclined, indeed, to account for the latter, by the profuse sweatings induced by the violent exercise ; but he admits that the physicians could not cure it by artificial sweatings. Sauvages, a great nosological authority, appears to have suspected that some error had been committed either in observation, or at all events in explanation ; for he begins by giving the opinions of authorities up to his epoch, (they are before the reader,) and then very distinctly says, "several experiments have been made at Rome, with the tarantula ; its bite causes pain, the parts swell and become livid, and in a few days the tumour is covered with a blackish scab. These symptoms are accompanied with sighing, cardialgia, or oppression, at the heart, and afterwards pains in all the articulations ; but no one has ever observed that those bitten have danced, or evinced any desire to dance. They have been cured by the use of the ordinary diaphoretics." Again he shrewdly remarks, "no author mentions tarantismus before the fifteenth century, although the tarantula was known long before. There are numbers in Sicily, Malta, Africa, and the Southern provinces of Apulia." However, we think he goes too far when he asserts, that the effects of the bite of the tar-

antula have nothing in common with the disease called tarantismus, an assertion which, taken along with the context, shows that he did not recognize the possibility of any convulsive affection being produced by such wound, of which we have not only sufficient evidence, but the occurrence ought not to strike any one as more singular, than the phenomena of tetanus or hydrophobia. We must remember, that both the true and the false tarantism, were—perhaps, only—certainly in a very large majority of cases—observed during the warmest part of the year, indeed the author we have now before us, says “heat alone suffices to cause the disease, in those who are predisposed to this species of madness.”

We should have been inclined to wonder that the eyes of the acute Baglivi had not been opened by the observation he makes, that *tarantism would return annually*, about the same time of year that the patient was bitten, (although it is on record that the great majority of those affected with the disease, had no recollection whatever of ever having been bitten,) were we not aware of the prevalence of a popular delusion of much the same character with regard to the bite of venomous serpents in general, and the rattle-snake in particular. No one can have any difficulty in believing that the dancing mania returned at about the same annual periods, who is familiar with the natural history of that class of diseases, indeed Baglivi appears to have been struck with its resemblance to the German chorea Saneti Viti, in that respect. He appears also to have been ignorant of the most ordinary phenomena produced by the veritable bite of the big spider, and that the symptoms were relieved by the use of ordinary diaphoretics, or he would hardly have failed to have been struck by the exception to the rule in the case of the dancers, whose cases prove refractory under the use of such medicines, but yet are cured, as he is inclined to believe, by the sweating consequent on their violent exertions.

To these three varieties of the same disease—the dancing mania of the fourteenth century, the chorea Santi Viti of the Germans, and the tarantismus of the Italians—we have to add a notice of some other minor manifestations of related affections.

In some parts of Scotland, as Forfarshire, Angus-shire, Orkney and Shetland, a disease known by the name of the “leaping ague” is endemic. It is characterized by an irresistible propensity to leap or to run straight forward, without stopping, sometimes for incredible distances. “Those affected first complain of a pain in the head, or lower part of the back, to which succeed convulsive fits, or fits of dancing at certain

periods. During the paroxysms they have all the appearance of madness, distorting their bodies in various ways, and leaping and springing in a surprising manner, whence the disease has derived its vulgar name. Sometimes they run with astonishing velocity, and often over dangerous passes, to some place out of doors, which they have fixed on in their own minds, or perhaps even mentioued to those in company with them, and then drop down quite exhausted. At other times, especially when confined to the house, they climb in the most singular manner. In cottages for example, they leap from the floor to what are called the baulks, or those beams by which the rafters are joined together, springing from one to another with the agility of a cat, or whirling round one of them with a motion resembling the fly of a jack." It is remarkable that the muscular motions, though in a great degree involuntary, are performed with extraordinary agility and exactness, the affected performing feats which surpass those of professed tumblers, balancing the body with correctness, and dextrously avoiding dangers, in which this disease differs very remarkably from our modern chorea. The leaping ague—so called from its paroxysmatic character—is propagated by imitation, and seems to be accompanied with much less aberration of mind, than the disorders already mentioned.

In the epidemic which occurred in the Western districts of America about the year 1800, according to Dr. Robertson, who published an account of it in his inaugural essay, influenced by religious enthusiasm, new converts to the faith indulged in alternate fits of coughing, laughing, singing, shouting, and extravagant and violent gesticulations, until at length, to their own astonishment, they continued to act *from necessity* the curious character which they had commenced from choice, and were sometimes thrown on the ground, where for some time the motions resembled those of a live fish when thrown upon land, more than anything else. By degrees the more violent convulsions subsided into chronic chorea-like movements. But similar phenomena have been so common at revivals and camp-meetings, as to need no further notice, except to call attention to the evidence of propagation by psychical contagion already alluded to, which is afforded by the fact that children who happen to have witnessed such scenes, are attacked with similar disorders, although incapable of comprehending the feelings agitating the bosoms of their older companions, and often have retained for life incurable nervous affections, embittering their very existence. The Jumpers also, a sect of Methodists founded by two fanatics in the year 1760, present scenes at their meetings, which if possible exceed in extrava-

gance those of the French convulsionists, at the tomb of a priest of the name of Paris, in the church-yard of St. Medard. "The excesses of these last mentioned were carried to so fearful an extent, and their religious ceremonies were so debased by obscenities, that the police was obliged to interfere, and forbid these detestable practices; hence it was affirmed that the following somewhat impious notice was suspended over the church door:

De par le Roi, defense a Dieu,
De faire miracle en a lieu.

The king was Louis XV.

There are quite a number of anomalous forms of convulsion, bearing more or less marked resemblance to that of the mad dancers. Occasionally there have been movements uninfluenced by music, occasionally the patients are haunted by a certain tune, irresistibly compelling them to dance. Majendie describes a very extraordinary case, in which the body of the sufferer was thrown into every conceivable contortion, but he never lost his balance, nor fell down. In such cases there has been pain in the head, often excruciating, sometimes in the back, occasionally when the patients were women in the uterine region; and in one case where there was no pain, there was intolerance of light. "Three cases, occurring in one family in the county of Rutland, are related by Dr. Armstrong, in the ninth volume of the *Edinburg Medical Commentaries*, in which the patients were affected periodically and suddenly, with fits of shrieking, jumping, writhing, &c. The disease first occurred after hooping-cough, and Dr. Armstrong considered it epileptic." These cases were cured for the most part very quickly by means of local depletion and counter-irritation; one case which had proved obstinate under treatment, yielded at once to a spontaneous diarrhœa.

We shall now proceed with the history of the Swedish epidemic, and commence with *the very first case* that occurred.

CASE 1. A yeoman's daughter, living at Alsarp, in the parish of Hjelmseryd, province of lönköping, Lisa Andersdotter by name, 16 years of age, of good constitution, and who had from childhood enjoyed good health, began to suffer from gastralgia and hemicrania, in the early part of May, 1811, and these symptoms steadily increased for six weeks. She had been bled several times, venesection being much in fashion in the neighborhood where she resided. About Midsummer obstinate hiccup, and clonic spasms, especially of the arms and shoulders, came on, with, at times, attacks of dyspnœa, so

severe, that by the 26th of June her life was thought to be in danger. It was now observed that the spasms returned in paroxysms daily, and she became so weak as to be obliged to keep her bed, and when able employed herself chiefly in reading her bible, hymn-book, and other works of a religious character. Her friends supposed her to suffer from Raphania, Cereal Convulsion or Ergotism, a disease quite common some years, and which had been epidemic in the neighborhood but a short time before, and therefore contented themselves with asking the advice of an old wiseacre, having no real pretensions to medical skill. She had neither shown signs of melancholy, nor of exaltation. Towards the end of September, she began to sing psalms, by her own account involuntarily, and the instinct to do so soon became so powerful, as to leave her scarce time to eat. At the very first she only hummed without any set tune, but by degrees began to sing words to real melodies, and at last her voice became clearer and stronger than in her healthy state. Two weeks after this, she began to preach, at first at long intervals, afterwards at shorter, but *never when alone*. She was now believed by the people to be, as she herself asserted, inspired by the Holy Ghost, and crowds of the curious came to hear her sermons and prophecies, and their admiration and blind faith so stimulated her desire to preach, that such paroxysms of sermonizing attacked her several times a day, especially of an evening, and on such occasions she became so excited, that bathed in perspiration she persisted until she fell back utterly exhausted. She often fell into a state of incomplete syncope, and sometimes into a condition resembling magnetic sleep, during the continuance of which, she was supposed to be receiving revelations from above, and out of which she waked up with violent spasms, and began to preach in the name of God the Father, God the son, and God the Holy Ghost. She preached about conversion, regeneration, against the sins of pride, intemperance, and so forth, with now and then extravagancies about the day of judgment. All that she said, was by her account, inspired by the Holy Ghost, she could neither add nor take away one iota. Between the attacks, she was perfectly calm, sane, and good-humored; showing no trace of delusion, and conversing very rationally even about her own condition. She observed that her sufferings were so severe during the paroxysms, that certainly no one would wish to be in such a state; that it was not clear to her, whether her condition, was the result of a special divine interposition, or was only disease; at the same time she expressed no desire to get well, but said she was content as God willed it. On the 13th of November, she prophe-

cied that she should preach for the last time, just one week after, and would soon afterwards die, and she named another girl of thirteen, upon whom her mantle was to descend, that is to say who was to continue the preaching. So much of this prophecy as relates to the preaching, came true, insomuch that she really did cease to preach after the 20th of November. However she not only continued to live, but the spasms continued as before; indeed Dr. Carlson found her still in bed on the 11th of April, 1842, still subject to the most violent contortions, grimaces, and twitchings, although in other respects apparently healthy, being fleshy, in good spirits, and all her functions properly discharged. It was observed that she did not now lose consciousness during the most convulsive paroxysms; whereas at an earlier period it had been remarked that in proportion as these diminished, and the general health improved, so had the instinct to preach been developed. One of the very excellent physicians who have given us reports of this case, considered that gastric derangement had been produced by the combined influence of cold, damp, and improper food; that a hysterical condition existed perhaps from some ovarian excitement connected with the period of evolution, and that want of force of character, together with the belief of herself and her neighbors, that she was inspired of heaven, had occasioned the extraordinary development of the psychical phenomena.

Both the sister of Lisa, 18 years of age, and also the girl of 13, that Lisa named as her successor, were afterwards affected in the same manner.

CASE 2. Johanna Persdotter, 16 years old, had always been wilful, disobedient and idle. When compelled to do her lessons, used to throw herself on the ground, bite the grass or her clothes, and fall into convulsions, all of which was cured with a sound whipping. She was attacked with symptoms similar to Lisa's, but not so violent. This girl, who was good looking, with very pretty and lively eyes and fresh color, when she waked up from the trance-like condition, was in the habit of seizing a lighted candle, and passing it rapidly about her face, now glowing with excitement and apparent inspiration, so as in the words of the physician who related her case, to produce quite "a mystic, bewitching effect." Her voice was soft, sweet, remarkably agreeable; but her sermons, which lasted but from five to ten minutes, were a mere jumble of the most common-place phrases. This girl afterwards travelled about the country preaching, and at every place at which she stopped, left a number of similarly affected.

CASE 3. Lotta Osterlund, 16 years of age, after having only once seen and heard another already affected, was first attacked with chorea-like spasms in the upper and lower extremities, after which she began to preach, saying that she was inspired, and had received revelations from above. Her violence was extreme, and if her hearers were not sufficiently attentive, the spasms in her limbs and countenance became horrible to witness; she jumped and gesticulated, while screaming out her anathemas at the top of her voice, until she fell down exhausted, when she lay in a sort of trance for the space of half an hour, and immediately on waking up, again began to preach such things as she said had been revealed to her during her trance. Inflammation of the brain afterwards came on, she narrowly escaped with her life, and at the latest date up to which we have any accounts, her mind had not fully recovered its normal condition, and she had lost all memory of every thing that had occurred from the commencement of her preaching mania.

CASE 4. The girl Hedda, 14 years old, of good constitution, lively and good humored, had heard Johanna Persdotter preach. One Sunday afterwards, as she was reading the bible, she was attacked with spasms in her arms, accompanied with an agreeable sensation. She lay down, when the movements became slower, and she fell into a trance-like state. The spasms afterwards returned daily, and in due time followed preaching. In this case the spasms came on whenever any one mentioned anything *sinful* or if any idea of the sort crossed her mind. She enjoyed otherwise the best possible health, and was very happy at what she considered her good fortune. Her whole appearance was that of a person in a state of unusual agreeable excitement. She was perfectly cured by ten days treatment in the Provincial Hospital, when this excited appearance passed off entirely.

CASE 5. Inga Lena, considerably older than either of the foregoing, had been anathematized by one of the preaching women, took it to heart, became disturbed in mind, and began to creep on her hands and knees, as she said to humble herself and find grace. This woman soon became wholly insane, and was not restored to health at the last accounts.

CASE 6. Hallberg, a schoolmaster, had been in constant attendance on Johanna Persdotter, night and day for five or six weeks; at last he began to have slight spasms himself, looked wild, and his eyes were brilliant, preached in a loud voice, but when he caught the doctor's eye steadily fixed on him, he stammered, and abruptly closed his discourse with an "Amen!"

CASE 7. Inga Stina, domestic, 27 years old, preached several hours at a time, at the very top of her voice, with violent gesticulations. She called down curses on the heads of all who did not believe on her. The physician who relates her case found on examination, that she was perfectly insane; she had not had any of the chorea-like symptoms, but had suffered from anxiety and sinking at the pit of the stomach, with considerable dyspnœa. Her general health had been very bad for a number of years, and she had been much troubled with gastrodynia. With a mere modicum of religious knowledge, she had lost no opportunity of hearing a fanatic clergyman, whose ranting discourses had finally upset her reason. Not the less had she abundance of followers, and it was really melancholy to see crowds of people, so debased as to kneel in the snow at the feet of raving lunatics.

Our space has only permitted us to give a mere abstract of these seven cases; we believe, however, that we have presented our readers not only with the prominent features of each case, and above all of the first case which occurred, but with fair specimens of the different varieties. The disease was mainly confined to those of from sixteen to thirty years of age; however, it was not only by no means uncommon in children of from six to sixteen, but even occasionally attacked the aged. The plurality of the affected were women, and it is worthy of note that the men did not succeed in making such an impression by their preaching as the women, perhaps because they were rarely capable of such extravagant demonstrations. The disease, although most common among the yeomanry, was seen now and then in the more highly educated classes. In some, the somatic, in others the mental phenomena were most striking, a few cases were marked by the total absence of the one or the other group. In the mildest cases, those affected were able to control the symptoms, or to prevent their occurrence altogether, by a powerful exertion of the will; but in severer forms of the disease, such exertions of the will were unsuccessful, and in common with all other attempts to repress the outbreak of the paroxysm, seemed only to exasperate it, and occasioned its protraction weeks or months. All received the disease by what we have already termed psychical contagion, that is by seeing or hearing another affected with it; no one is known to have acquired it in any other mode, except the first affected, who may be fairly said to have read herself into it. It was indeed vaguely rumored that some had sickened after hearing a lively description of the exciting proceedings at these preaching bouts, but the physicians who were in the midst of the epidemic do not credit the story. The number

attacked is not known with any certainty ; but must at least have reached several thousand ; three hundred observed cases were reported to the college of health by the provincial medical officers. Like most epidemics, this one also attained its maximum of development by degrees, and then slowly declined. The crowds who greedily swallowed the nonsense which these often half-naked girls uttered, (for their so-called preaching deserves no better name,) took their part against all the first attempts of the clergy and the physicians to put a stop to the evil ; and several of the latter mention hair-breadth escapes from the violence of the mob ; Johanna Pehrsson, indeed, appears to have saved the life of one of them, by restraining the fanatic crowd, for which he expresses himself duly thankful. One would have expected that none but the most illiterate and superstitious, taken by surprise, would allow themselves to be deceived by mad proceedings that would not bear a moment's serious examination by the light of religion or of reason ; and yet the folks (many of whom bore a character for unusual good sense,) to the number of, not hundreds, but thousands, filled and surrounded the hut in which a little chit of a girl, or a mad servant wench saved the air in a paroxysm of mania, and reverently listened to the veriest ranting rubbish that ever insulted human understanding, driving away with violence, with clubs and stones, the minister of the gospel who would enlighten their miserable darkness, the physician who came to heal the sick, or the servant of the state, who would bid them respect the majesty of the law. The rector of one parish, after being severely beaten, only escaped with his life by the swiftness of his horses. One of the reporting physicians, was twice severely handled for attempting to observe the sick more narrowly, and only succeeds at last, by the aid of a body-guard of between twenty and thirty stout fellows, who were personally attached to him. He describes a scene in one place where, in a miserable hut, a dozen mad-men gave their feelings full swing, barking like dogs, howling like wolves, hopping, jumping, dancing, rolling on the floor ; now praying, now crying ; the tears running in streams down their cheeks ; they were crushed to the earth by unbridled and exaggerated emotion. One would think this description was taken from Dr. Robertson's history of the American epidemic of 1800, already quoted, so exactly do they tally.

Although in the majority of cases, no premonitory stage could be detected, but the disease burst forth at once, a true stadium prodromorum was nevertheless occasionally observed, in the form of anxiety, oppression, inquietude, sensation of

weight or absolute pain in the head and limbs, dyspnœa, loss of appetite, cardialgia, tendency to more or less complete syncope, a general sense of sickness, loss of the power of will over the voluntary muscles, disinclination to labour, irritable temper, wilfulness, &c., with shifting color, and change of expression of the eyes, they commonly becoming very bright.

The breaking out of the disease was marked by the spasmodic movements, the ecstatic condition, and the irresistible propensity to declaim on religious subjects,—or as the people called it, to preach.

The spasms consisted principally in violent twitchings of the muscles of the face, trunk and extremities, oftener of the shoulders, sometimes frightful, at others irresistibly ludicrous, occasionally in hops and leaps, sometimes so violent as to throw the patient from the chair on which he was sitting or the bed upon which he was lying. But nothing like the half paralytic symptoms of ordinary chorea were observed. Any thing which was offensive to the sick, occasioned or increased the spasms. A word dropped in conversation, and in itself innocent, might strike some chord, which the fantasy of the affected person caused to vibrate in sympathy, and produce an immediate paroxysm. For the rest, the spasms returned at uncertain periods, most frequently when wondering strangers were present, seldom when the patient was alone, very rarely during sleep.

The functions of the system were but little interfered with, appetite, dejections, sleep, &c., &c., were normal; the paroxysms however, were followed by considerable sense of fatigue, weakness and debility. Several degrees of severity were observed, practically we need only mention two—the milder and the more severe. Both were marked by the same spasms, the same preaching mania, the same belief in the direct influence of the Holy Ghost. That may be properly styled the severer form in which the trance-like condition was most perfectly marked, or the state of unconsciousness of an external world, during which they might laugh, sigh, clap their hands, and so on, but it was in one or other of these states, that they had their visions—visions in all cases of the same character, namely, of heaven or hell, angels or demons, &c., just as the desire to declaim, always found a vent in what we may call a rhapsody of religious commonplaces. It would be evidently wrong to consider those cases of mania, melancholia, or dementia, in which the preaching-disease sometimes ended, as a higher degree of the same; the two having really little in common, the original and distinctive characters of the prima-

ry disease, being merged in another chronic mental disorder, displaying its characteristic symptoms.

It is well to understand distinctly that this, like many similar preceding epidemics, was marked by two prominent groups of symptoms, the *somatic* chorea-like spasms, or involuntary muscular movements, and the *psychical*, namely the state of cataleptic ecstasy, and the irresistible desire to declaim on those subjects which occupied the mind during the ecstatic seizure.

The therapeutic means employed, varied somewhat according to the views of the different physicians with regard to the real nature of the disease; the remedies may however, all be classed under the heads of antiphlogistics, antispasmodics, or narcotics. The list comprises depletion, general and local—derivation, by means of vesication, pustulation, or rubefaction—calomel, saline purgatives, nitrate of potassa, borax—oxide of zinc, assafoetida, castor, &c.—camphor, opium, and extract of stramonium. It would be a waste of time to particularize, to dwell on the accidental complications, in the treatment of which such a battery of remedies might have been wisely employed according to the indications, but we have our scruples as to their fitness in uncomplicated cases. Nevertheless, one effect of treatment, whether antiphlogistic, antispasmodic, narcotic, or what not, is of too great importance to be passed over so lightly, we mean *the psychical*. When the patient who believes himself, and is believed by others, to be the favoured of heaven, possessed of a demon, or in some way or other under the influence of unearthly powers, to which resistance would be impious or vain, finds himself treated as one sick—diseased—sooner or later he will come to the conclusion that he *is* sick, and the moment that conviction forces itself upon his mind, he is half cured, the most important symptom—the belief in superhuman influence—is relieved. We should very frequently, beyond all question, effect a cure without the administration of one single dose of medicine, by simply allowing the affected person to continue his preaching unrestrained, but removing his gaping audience, and letting him understand that he was considered sick, and his visions and prophecies merely the delusions and delirious ravings of a sick person—this plan was indeed eminently successful.

In the absence of post-mortem examination, and reasoning from the phenomena observed in analogous cases, there appear no grounds to suppose the existence of inflammatory action in any part of the cerebo-spinal system. There may be, doubtless is, *some* physical change or another necessarily connected with the disturbed mental and nervous manifestations; for we cannot conceive a deranged function, without

physical change in the organ which performs that function, although in this and parallel cases, it is of a kind that has hitherto escaped even modern microscopic investigation; and we think it would hardly be worth the while to search in our *Materia Medica* for a medicine to cure—religious ecstasy.

The confining of the disease to a certain class, shows that certain predisposing causes must have been in existence; these may have been *physical* or *psychical*, or both. We will commence with *drunkenness*; and here we must quote Dr. Sonden's essay, lest we be thought extravagant in our language.

"Physical and psychical excitement, and both to an unusual extent, are the result of the contest between the lust for strong drinks and the newly awakened temperance movement, combined with fanatic sectarianism. We see on the one side a low and sensual passion for intoxicating beverage, paralysing the powers of body and mind, lowering the standard of morality, destroying order, thrift, and the welfare of families, annihilating all feelings of honor and virtue, and finally debasing its slave below the level of the brute. We see on the other hand, stern preachers of temperance, fanatic teachers and sectarian apostles, who with the pains and penalties of religion and the law, or with blind superstition and false tenets, now seducing, now intimidating, wake up in terror the slumbering conscience, and the smothered feeling of forgotten or despised religious and moral duty. The poor heart becomes a prey to the most opposite feelings and desires; and if self reproaches and regrets do not, with their rending pangs, occasion insanity so often as we might expect, but rather degradation, ruin and misery, they are yet so agitating as, with the aid of coinciding tendencies, to tear asunder the guiding reins of reason, and to substitute the groans of despair and the shouts of insanity." The foregoing extract paints the condition in which numbers were placed previous to and during the continuance of the epidemic, and the causes of that condition. There can exist no doubt as to the powerfully predisposing effect of such a condition.

To this must be added the influence of *food of bad quality*. The crops had failed two years in succession, and the most important article of the people's food—bread—was both scarce and anything but good. No one will deny that unwholesome and insufficient food will lower the vital powers, directly occasion disease, or, which is of the greatest importance to this investigation, induce an unusual susceptibility to the injurious effects of both physical and psychical causes of disease. Many physicians indeed, persisted in attributing the epidemic to the poisonous influence of foreign ingredients in

the rye which almost exclusively constitutes the bread-corn of that part of Sweden, mainly to ergot, which was particularly common during the years in question. But independent of the fact, that minute examination detected no foreign ingredient of poisonous character in the corn, except ergot, there is no substance we are acquainted with, possessed of the property of occasioning religious mania. The idea, doubtless, had its origin in the circumstance that Raphania had been epidemic of late years in those parts, and in consequence of the spasms common to both diseases, they actually were at first confounded. That the injestion of spurred rye will produce disease, there is no doubt, but that disease is not religious mania.

We have no observations on *meteoric phenomena*, from which to draw any conclusions as to the predisposing effects of weather and the like, their absence, however, is probably of little importance.

It has already been mentioned that the *age* of the majority of those affected, was from 16 to 30 years; the next largest class included children of from 6 to 16, and a small number were over the age of 30, or were old people.

With regard to *sex*, girls and young married women constituted a very large majority; and in respect of *constitution* and *temperament*, no conclusions can be drawn.

The *psychical causes* we think more interesting, and, as being less generally understood, more important than any of those we have been considering; and first of *Education*.

Education among the people who were the subjects of this disease, with the exception of religion, was confined to the business of life, the mere mechanical performance of daily labor. Religion is the only field in which the imagination of such folks finds room to roam; and one thing is certain, that even where no false prophets disturb the balance of the mind, the religious knowledge they do possess is so scant as to leave abundant space for unbelief, superstition and fanaticism. We must remember too, that ignorance leaves people without a guide, allows them to entertain the most absurd ideas on all subjects where common sense, or the positive doctrines of religion, are not sufficient to enlighten and to guide them. Add to this the historical fact, that phenomena of the nature described, have always been observed among the least educated, as was the case in Sweden, and another historical fact, namely, that in the portion of that country in which the disease arose and spread, the minds of the people had for a considerable time been disturbed by the prelections of sectarian and fanatic priests, and by the reading of inflammatory pamphlets,

while there is too much reason to fear that the duties of the regular ministry, in spreading a knowledge of true religion, and in the religious care of their flocks in general, had been sadly neglected. From similar causes, similar consequences have followed on several prior occasions, although the disease never took on so serious an epidemic form. Fifty years before a number of persons had been sent to the insane asylum at Danvik, afflicted with the "preaching madness," of whom only one recovered, the others remained incurably insane. They were sent to the asylum in order to stop the spread of the disease; a measure that proved perfectly successful. Since then, different parts of the country have at times been troubled with partial outbreaks of religious fanaticism, which if they did not merge into mania, were very near it, having lead to naked dances, public baptism in rivers, unbridled intercourse between the sexes, &c. Not without interest, are some of the remarks of Deacon Ponten, who has been in the habit of treating insane, in his own house, for upwards of 40 years, and lives just in the very neighborhood of the place where the epidemic broke out. He says: "I think I have observed, that of late, insanity has more commonly been caused by the influence of the mind, whereas 20 or 30 years since, the contrary was the rule. The number of those affected with insanity, is decidedly on the increase of late years," which he attributes to the influence of fanatical preaching, and the physical diseases caused by the abuse of alcoholic drinks. He observes, that if an evil-minded person be roused to repentance by a ranting priest, he is very apt to become a prey to a lasting melancholy and anxiety, and to be seized with what the doctor aptly calls "panophobia."

An ignorant people, a prey to the malign influence of the predisposing mental and physical causes of such disease, would not require much additional impulse, to be driven on to absolute insanity; and this impulse was given, when a young girl, rendered extremely excitable and susceptible, by the effect of a tedious chronic nervous affection, after much reading of the bible and of other religious books, fell into a state of cataleptic ecstasy. The disease spread like a prairie fire, among the excited people, numbers fell into the same condition, many suffered in different degrees, and almost every one felt the influence of the epidemic, even if not drawn into its vortex. It is rare indeed, as it appears to us, that the causes of a psychological disease, have been so clearly displayed.

If by the continued study of religious works, giving free play to the imagination, and abandoning the guidance of the understanding, a person becomes deranged—or if the same lot

befall a poor sinner, led by his newly awakened conscience to despair of salvation—no epidemic dates its origin from their visitation, none are affected by psychical contagion, provided those who come into contact with the sick, have not been predisposed to the same affection, by having been exposed to similar influences. Were it not so, a whole nation might be infected by a single maniac. For a disease to prove epidemic, predisposition in those who surround the sick, is commonly necessary, and here we have a concatenation of circumstances—suffering from want, food of bad quality as well as insufficient, intemperance, and the effect on the minds of ignorant and sensual people, produced by a narrow and one-sided study of religious works, and the ranting declamations of fanatics—those of a physical nature aiding, those of a psychical of necessity ending, in the production of a morbidly excited state of mind, constituting *a predisposition to religious insanity*, without the existence of which no such disease as the one under consideration, could ever appear as an epidemic. Such predisposition must have existed previous to the celebration of St. John the Baptist's day, in 1374, after the outrageous excesses and bacchanalian orgies of which, the dancing-mania burst forth a frightful moral pestilence.

The *nature* of the disease, and therefore its appropriate *name*, have both given rise to much inkshed. Its *synonymes* bear witness to the different views which have been held on the subject; Enthusiasmus, Galen;—Saltus Valentini l. Viti, Plater;—Chorea Sancti Viti, Sennert and others;—Melancholia Saltans, Sauvages;—Ballismus, Svediaur;—Tanzwuth, (St. Johannis, St. Veits Tans,) Hecker;—Dæmonomania, Broussais; Theomania, (Mal de St. Jean,) Esquirol;—Religious Ecstacy, Sonden. The following names have been applied indiscriminately to this disease, to some of its varieties, and to very different ones: Scelotyrbe, Tarantismus, Carnevalette delle donne, Scelotyrbe Festinans, Hieranosis, Choreomania, Orchestromania, Chorea Sti Modesti, Epilepsia Saltatoria, Dans de St. Guy, Leaping Ague, and some others.

A little investigation and reflection suffice to show, that in their observations and the conclusions drawn from them, some have only paid attention to the physical phenomena, and then applied the term "chorea," or its equivalents, to the disease; others, on the other hand, have exclusively considered the mental, and hence the terms "Theomania," "Demonomania."

We shall never, medically speaking, acquire any real knowledge of the nature of mental diseases, until we learn to consider man as one whole—body and soul—duality in unity;

and receive as an axiom, that somatic and psychical phenomena never occur independent of each other. It is true, that under different circumstances, now the one now the other preponderate, even to such a degree that the one may be entirely lost to view in the exaggerated development of the other.— True, also, we distinguish two great classes of disease affecting the brain, namely, *organic*, such as congenital deformities, inflammation, extravasation, suppuration, effusion, degeneration, the consequences of external violence, &c.; in a word, visible, tangible, organic changes—and *functional*, as disordered susceptibility to impressions, paralysis, disordered mental and moral manifestations, exaggerated passion and emotion, paralysis of the will, &c.; science very properly makes a distinction between these two classes, but experience teaches us their mutual dependence and intimate relation in the majority of cases, and we are compelled to believe that however dimly revealed, sometimes indeed concealed from us, this intimate connection and dependence is invariable as it is necessary. How impossible, how unnatural then, to draw a line of demarkation between psychical and somatic disorders, if we regard the fact that organic derangements of the cerebrum may and do cause modifications in mental and moral manifestations, and that mental and moral affections may and do cause organic derangements of the cerebrum.

The characteristics of true chorea, are tremulous, irregular, involuntary motions of the muscles of voluntary motion, without pain, and more marked on one side than on the other, occurring sporadically, and chiefly affecting females between eight and fifteen years of age, to a certain extent under the influence of the will. The disease is, we believe, never contagious by intercourse with other sick, and when it occurs past the age of puberty, is very apt to prove incurable. The eyes lack lustre and expression, the look is vacant, the temper irritable, and the emotions are exaggerated, often indeed no cause for their manifestation can be discovered. The only diseases of importance to our investigation, in which chorea terminates, are idiocy among the psychical, and convulsions, epilepsy, apoplexy, palsy and hydrocephalus, among the somatic.

In the disease which has been confounded with it, the convulsive moments are commonly symmetrical, are less under the influence of the will, and alternate with intervals of sleep or of cataleptic ecstasy. The majority of those attacked are females, from 16 to 30 years of age; and when the disease once makes its appearance, it spreads rapidly among the predisposed who come into contact with those already affected.

The eyes are brilliant, the countenance lively and expressive; the patient believes that he or she is under the direct and irresistible influence of spiritual powers, and acts on the delusion; on all other subjects is perfectly sane. The very great majority recover; the disease now and then terminates in phrenitis or mania, and is then very rarely completely cured. In the disease under consideration, a muscular organ is affected in its totality; in chorea, each individual muscle composing such organ, is liable to independent convulsion, so that in the former the convulsions consist in exaggerated and involuntary muscular movements, in natural order and combination; in the latter, of such movements without a trace of order or combination, each individual muscle contracting as it were "on its own hook." And indeed the striking differences between the two diseases, may be figuratively expressed thus: in the dancing or preaching monomania, the fancy has broken bounds, and the muscles are bound to follow her mad career; in chorea, a number of individual muscles have thrown off their allegiance to volition, and become insane.

Having, we trust, shown that the disease is not chorea, it remains for us to show what it is, and to place it in its appropriate nosological position. A simple definition will save many words. A disease characterized by *delusion*—(*the affected believing himself inspired, that he has visions, and holds converse with spirits*.) *irresistible propensity to declaim on the subjects occupying his mind during his visions, coming on in paroxysms, often preceded or accompanied by involuntary muscular movements; the paroxysm sometimes terminating in a condition more or less resembling cataleptic ecstasy, the eyes throughout the disease being remarkable brilliant, and the expression of countenance animated and inspired*—is a mental disease, is insanity, and we think the best epithet by which to designate this particular form, is the one proposed by Dr. Sonden, *Religious Ecstasy*.

No doubt the convulsive affection conjoined with the psychological, is an important complication, and certainly a very interesting one, for experience teaches, that in no other form of mental disease are such affectionous so common or so violent, as in religious mania, for the reason we are inclined to believe, that nothing so thoroughly deranges the normal relations of mind and body, and especially of volition and the muscular system, as excited fancy, most especially when exercised on the mysterious, the awful, the superhuman, and hence too, the unusual tendency to important sympathetic and reflected affections of the digestive and generative apparatus, &c., as well as of the muscular system, in all forms of religious insanity. The importance of such complications, however, is not

nosological, and therefore we leave them without further notice, only reminding our readers, that they were not only, according to the Bible, common in those "possessed," but also to the heathen Sybils and Pythias, as well as to modern Methodists, and to those declaiming in "unknown tongues," in the Rev. Mr. Irving's church, in London.

Religious Ecstasy is by no means to be confounded with demonomania, theomania, &c.; for these are characterized by a chronic character, a more permanently insane condition, with few or incomplete remissions, commonly ending fatally, and not contagious.

For the related disorders — leaping-ague, one form of tarantism, and such cases as those of Mr. Kinder Wood, Dr. Watt, &c., unaccompanied by delusion, the old term choreomania, seems to us eminently applicable, as the Greek word from which the term chorea is taken, signifies "a dance." As this disease, too, is sometimes epidemic and contagious, the term epidemic should in such cases be prefixed. Dr. Haygarth has published a remarkable occurrence of this kind, which took place in the Isle of Anglesea, in 1796, where 23 females, of from 10 to 25 years of age, and a lad of 17, who had all had intercourse with each other, were seized with slight pain of the head, or of the stomach and left side, followed by twitchings or convulsions of the upper extremities, continuing with little intermission and with much violence for a considerable time. The pulse was moderate, the bowels costive, and the general health not much impaired. There was usually hiccup, and when the convulsions were most violent, giddiness, with loss of hearing and recollection. During convalescence, the least fright or sudden alarm, brought on a slight paroxysm.

The principle which should govern the treatment of Religious Ecstasy, appears to us to be contained in this little sentence — as much common sense, as little emotion as possible. Separation from the gaping audience, the friends and acquaintances whose open mouths too often reveal the stupid wonder with which they regard the unusual phenomena, and in the absence of whom the disease in the greater number of cases, never would have been developed, must form the basis of all treatment. As well might we expose the inflamed retina to the glare of the mid-day sun, as allow that which can but feed the flame of excited fantasy; especially when we recollect that in this case it is most commonly kindled at the very age when the desire for sympathy is apt to overleap the rational bounds, within which it is normally and usefully confined. Isolation — which in religious monomania is frequently injurious — suffices for the speedy cure of uncomplicated cases,

and stems at once the current of an epidemic. For the rest, the physician should be as a father to his patients; but his patients must respect his directions as becomes children. The only real difficulty in the treatment of cases, during the prevalence of an epidemic of this nature, arises from opposition on the part of the ignorant and superstitious, to interference in any way with what they believe to be a divine dispensation, especially when the means proposed to be employed are so simple as temperance in diet, wholesome employment, and sufficient as well as appropriate amusement, which with temporary isolation, where necessary, constitute all that is required, not forgetting the treatment called for by special indications in individual cases.

We have, in the foregoing pages, confined ourselves to the purely practical consideration of the subject, convinced that as Voltaire said, "the greatest enemies the devil has, are the doctors," who are continually robbing him of some portion of his dominions. We have much to say on the psychological phenomena of this most interesting disease, but are fain to leave the completion of the subject to another opportunity.

ART. II.—*"THE JERKS."*—*The Illinois Baptist of January*

By R. H. JOHN-

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14 says that "This strange infatuation is again revived in our immediate vicinity. It made its appearance in a protracted meeting among the Methodists at Indian Grove. The ministers who conducted the meetings moved them from Indian Grove to Avoca, and brought with them five or six of the jerkers, and thus the contagion commenced in the latter place. Our informant was present at several of their meetings in Avoca and describes the scenes as very exciting. From fifty to a hundred were jerking at the same time. Their hands, shoulders, feet, and head would be violently thrown into the most grotesque and apparently painful shapes. The women's bonnets would fly off, their hair become dishevelled, and in some instances snap like a whip. In some instances it attacked unbelievers in it, and unconverted men who tried to resist it by folding their arms and wrapping them tightly around their bodies, but in spite of themselves, their shoulders, first one and then the other, would be jerked back, till they lost all control of themselves.

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draw from this great store-house, typhus or scarlet fever, yet we may draw from this great store-house, modes of treatment which shall come as near fulfilling the noble object at which we aim, as it is possible, or as He who may justly be styled the Greatest of Physicians, designed we should come. In looking back to the origin of physic, to those early times when this and all other arts and sciences had their beginnings, though they were rude and imperfect, we may derive wisdom from their contemplation. Herodotus, and after him Strabo, observe, that

it was a general custom among the Babylonians, to expose their sick persons to the view of stranger-travelers, in order to learn of them whether they had been afflicted with the same distemper, *and by what remedies they had been cured*. The custom in the days of the famous Hippocrates, was, for all persons that had been sick, and were cured, to put up a tablet in the temple of Æsculapius, wherein they gave an account of the remedies that had restored them to their health. That celebrated physician caused all these inscriptions and memorials to be copied out, and derived great advantages from them. Let our tablets be—our Medical Journals, and our temples—our libraries, that advantage may be derived from recorded experience in the treatment of disease.

No disease to which human flesh is heir to, makes such rapid and dreadful inroads upon every vital organ of life, as does “Asiatic” Cholera. It has its primordial origin in the nervous system; its secondary, in the alimentary canal. And it is with a view to the restoration of the last power of these two systems, that our treatment must mainly be directed. The utter paralysis of the *vis nervosa*, causes the flood-gates of every part of the body to open passively and discharge their contents into the stomach and alimentary canal, whence from this gulf it is carried off, leaving the system drained, withered and dead; as in like manner we see a frail flower, its moisture extracted, dying beneath the rays of the burning sun. And here it will be said, that the system must be replenished with that of which it has been drained; not so! And this is the point at which our treatment begins. This is the rock on which I believe that most, if not all, of my contemporaries of the profession founder. In pouring fluids into the stomach in cholera, you do not replenish the capillary vessels; nor, more important still, the great vessels—the blood-vessels—and thus supply them with the stimuli of which they have sustained so great a loss. The nervous filaments distributed to these smaller and greater vessels, are paralysed; and the last drop is pouring forth to the common receptacle and outlet—the stomach and alimentary canal. What is to be done? Give the patient *no fluids*. To this will be answered, as the patient often says—“Doctor, I shall die if I don’t have drink.” Not so; you will die if you have it. Better give nothing. But what then is to be done? Give medicine in the *dry form*, and apply mustard cataplasms externally—to the limbs and feet—over the stomach, bowels and heart. I have said, give no fluids. I mean to say, give none so long as there is any discharge from the stomach or bowels. After this has ceased, give strong green tea or coffee, and the camphor and ammo-

nia mixture in some form such as that prescribed at the close of this article. But give no fluids of any kind in malignant cholera, till reaction takes place; their effect is to poison the system, as shown by the aggravation of every symptom, and the patient is hurried into collapse and death. No kind of medical agent will stop these discharges, especially the vomiting, if any form of drink is given.

The following are the therapeutic agents which I have employed with almost universal success, in all stages of the disease :

℞ Pulv. Kino Compos:
Plumbi Acetatis:
Camphoræ āā. gr. xx:
Hydrarg. Submur:
Pulv. Capsici āā. gr. x:
Pulv. Opii. gr. v:

Mix, and divide into ten powders. Give one of these powders, in brown sugar, every half hour or hour, according to the urgency of the case.

The brown sugar will be found the best vehicle for the administration of the powder, as when melted in the mouth, it creates just sufficient moisture to form the powder into a mass, and to enable the patient to swallow it. But should any fluid be taken after it, the stomach will surely reject it. And here it may be observed, that vomiting is the most prostrating symptom present. It hastens the patient on to the collapse stage, with the most rapid and fatal certainty. Let it be checked by withholding fluids from the patient, and action of the bowels will also be checked. It is needless to speak of the character of the remedies composing the above prescription. The calomel may often be left out altogether, as the liver is passive in the disease, and will resume its function upon the restoration of the circulation of the vital fluid, of which it is deprived through the morbid action of the bowels. So soon as reaction takes place, convalescence is rapid under the influence of stimulants, and a generous diet.

For congestion of the brain and spasm of the stomach, leeches applied to the temples and epigastric region, give certain relief. For children, and mild cases, and the early stage of the disease in adults, the powders may be divided and subdivided.

Having the fullest confidence in the efficacy of the method of treatment above recorded, I deem it a duty to make it known for the use of others who may think proper to give it a trial.

One grain doses of calomel, with chalk and ipecacuan in powder, every two hours, till five or six are taken, in the consecutive fever of cholera, will be found of much value as an alterative; but I do not condescend with those who believe it to be essential to the cure of cholera, to produce salivation. I deprecate the use of mercury to the extent of salivation, in this and in all other diseases, if it can possibly be avoided; and cholera *can* be cured without salivation. It may here be observed, that it is far more important to employ this agent for the purpose and to the extent of correcting the secretions, *after* reaction has taken place, than before.

The following medicine for either choleraic or bilious diarrhœa, will be found efficacious:

℞ Pil. Hydrarg:
Plumbi Acet. āā gr. xii:
Pulv. Opii gr. vi:

Mixed and divide into six pills—one to be given every hour.

When the tongue is found free from bilious coats, the following may be substituted, either in the choleraic or bilious diarrhœa:

℞ Plumb. Acet. gr. xii:
Camphoræ:
Pulv. Opii āā gr. vi:

Mix and divide into six pills. One to be taken every hour.

The following as a stimulant in the collapse of cholera, after the vomiting and discharges from the bowels have ceased, may be used with much success:

℞ Aquæ Camphoræ ʒvi:
Ammon. Carb. ʒi:
Syrup. Zinzib. 9. s.:

A table spoonful to be given every hour or two.

The Camphor Julep of Ellis's Formulary, page 154, is the preparation I have used with the best success, and is prepared as follows:

℞ Camphoræ ʒi:
Aquæ Bullientis, ʒviii:

This preparation should be set aside in a covered vessel for half an hour, and then strained. A table spoonful for a dose, *pro re rata*.

ART. III.—*On Endemic Fever*. By DAVID A. HOFFMAN, M. D., of Jackson county, O.

Since December, 1849, Typhoid Remittent Fever has prevailed pretty extensively, in a low, wet, marshy district known as the Cove, seven miles west of Jackson; and as it differed somewhat from Enteric or Typhoid Fever, as described by authors, I have concluded to give a short account of it. It did not appear to be confined to any particular class of inhabitants, but attacked all ages and sexes, and in the commencement of its ravages, proved fatal in several instances; but I do not think death resulted in any case, from the disease possessing any peculiar malignancy, more than our ordinary febrile diseases, but from neglect in using proper remedial measures before the patients were "in articulo mortis." The laity considered it eminently contagious, but I have not seen any evidence to justify such an opinion; on the contrary, am convinced that it was no more so than our usual remittent fever. Some contend that it was induced by "marsh miasmata," from the fact that the country was favorably situated for the production of miasm; but I think it extremely doubtful whether this peculiar agent had anything to do with it; because heat, moisture, and vegetable decomposition combined, are essentially necessary to its formation, and this endemo-epidemic committed its greatest ravages in December and January, when the temperature of the atmosphere was below the point necessary to produce miasm; and furthermore, it ceased upon the approach of warm weather. These facts I think are sufficient to justify us in throwing aside the idea that miasm produced it. I believe it was induced by an endemo-epidemic constitution of the atmosphere, assisted doubtless by the usual exciting causes of disease; further than that I cannot say. It differed from enteric or typhoid fever, as described by authors, in the absence of tympanitis and the rose-colored eruption, both of which are characteristic phenomena of Enteric Fever. It differed also in the length of time it continued, as there appeared no more difficulty in arresting it, than we usually meet with in common remittent fever, provided it had not run on too long. If proper treatment was used in the commencement, the disease could be arrested in from 3 to 7 days, but if allowed to progress uninterruptedly, it would continue from one to two months, or longer. When first called to a patient, we invariably learned that he had been troubled with the premonitory symptoms of our ordinary bilious remittent fever; these were followed sooner or later by a slight chill, fever of a very low grade, pain in the head, sometimes

very severe, but generally dull, dulness of mind, dejected countenance, indisposition to talk, tongue dry and covered with a dark brown fur, teeth covered with sordes, extremities cold and clammy, pulse from 110 to 150, but feeble and wiry. The stomach was irritable, and diarrhea, or an extraordinary susceptibility to the action of cathartics, was present in every case. The urine when voided was very scanty and straw-coloured, but was generally suppressed; (in some cases none was passed for seventy-two hours,) and a peculiar and offensive odour was emitted from the body, resembling very much the smell of cat's urine. This smell was so strong that the disease could be readily recognized upon entering the house, by it alone. A complete remission occurred every morning, with an exacerbation in the evening. If the disease was not arrested, the symptoms became more alarming, the pulse disappeared, subsultus, stupor and profound coma supervened, and all efforts to arouse the patient were futile. As to the anatomical character of the disease, I say nothing, as I was not permitted to make a post-mortem examination. With regard to treatment, I used generally powders composed of calomel and camphor aa 4 gr., and pulvis Doveri 3 grs., every four hours, until the diarrhea was checked, and a slight impression made upon the gums, spiritus mindereri, artificial heat to the extremities, and blisters. Whenever a remission occurred, I gave quinine freely, combined with small doses of camphor, and wine, brandy, or carbonate ammonia. The patients would improve from the first upon wine and quinine. After continuing the above treatment, modified as occasion required, for a few days, the tongue would become moist and clean off, the urine would be discharged properly, and the patient rapidly recover. Such is a brief and imperfect history of the disease and the treatment. Whether the treatment was correct or not, I shall leave for older heads to decide, but I was successful in every case; while those who used antimonials, drastic cathartics and venesection, lost several.

ART. IV. — *Difficult Labour, Hydrocephalic Fœtus; Cephalotomy.*
By THOS. W. GORLON, M. D., Bazetta.

February 23d, 1848, I was called in consultation on the case of Mrs. C——, aged $19\frac{1}{2}$ years, engaged in labour with her first child. I found her lying, or rather half sitting on the edge of the bed, with her feet resting on two chairs; the accoucheur in attendance sitting on a third, a la mode Francaise. There was no pulse at the wrist, the countenance was extremely

pale, the eyes were rolled back, and the patient was apparently unconscious. There was no appearance of uterine contractions, nor had there been for the last 36 or 50 hours. I was requested by the physician in attendance, to make an examination, when I found the os uteri extensively dilated, the head of the fœtus in the first presentation, occupying the superior strait, and so large as to make it impossible for it to engage in the inferior. The anterior fontanelle was distended with fluid, the parietal and frontal bones were separated about half an inch at the coronal suture, and were quite movable. The attending physician having asked my opinion respecting the case, I told him that I believed the fœtus was hydrocephalic, and I had ascertained by auscultation, that it was dead; and therefore no benefit could result from further delay, but infinite harm. He replied, that not knowing whether the child was dead or not, he had delayed, in the hopes that nature would accomplish the delivery; stating that the pains had ceased, he knew not why, but that they had been active for some sixty or seventy hours since he was called on the preceding Sunday, this being the afternoon of Wednesday.

As I could see no reason for any further delay, but strongly felt the importance of a prompt delivery, I employed the perforator, on the introduction of which 50 or 60 ounces of bloody serum escaped. The blunt hook was then made use of, and gentle friction employed over the abdominal surface; in a few minutes the uterus began to act, and with the aid of slight traction, the fœtus was delivered, the head having collapsed. The patient being much exhausted, ammoma and spirits of lavender were administered, but not succeeding, "hot sling" was given until the pulse rose.

Appearance of the child: the frontal, parietal, and occipital bones were separated, and the temporal were displaced, so that there was no union at the squamous suture; the brain was found unfolded as it were, forming a lining to the cranial cavity of about half an inch in thickness.

With the exception of some after-pains and diarrhœa, easily relieved by the usual remedies, the patient recovered more rapidly than a majority of parturient women.

